REMARKS

Initially, Applicants would like to thank Examiner Brier for the courtesies extended during the telephonic interview conducted on July 16, 2007, during which the outstanding rejection based on 35 U.S.C. § 101 and *Kurosawa* were discussed.

Favorable reconsideration of the above-identified application is requested in view of the amendments made herein and the following remarks.

Rejections based on 35 U.S.C. § 112

Claims 32 - 33 under 35 U.S.C. § 112, first paragraph

The Office action raises an issue because the claims recite "at least one circuit for." The Examiner asserts that Figure 1 in the specification only shows "one circuit" 100 for performing the tasks referred to in the claims. However, the Examiner acknowledges that "the circuit of figure 1" is "formed from plural circuits". See the third and fourth lines from the bottom of page 2 of the Advisory Action dated January 16, 2007. With that understanding, Applicants have amended claims 32 and 33 so as to be consistent with the Examiner's interpretation. In other words, there is only one circuit for creating a presentation to the user, but that one circuit may be comprised of a plurality of circuits.

Claims 1-34 and 37-41 under 35 U.S.C. § 101:

The Examiner is of the belief that Claims 1 - 34 and 37 - 41 are non-statutory subject matter under § 101. For the following reasons, that position is traversed.

The Examiner finds support for the position that the claimed subject matter is nonstatutory in the Federal Circuit case *State Street Bank & Trust Co. v. Signature*

Financial Group Inc., 149 F.3d 1368 (Fed. Cir. 1998). The Examiner's position seems to be that the present claims preempt a mathematical algorithm because they do not provide for a practical application of the claimed process. Specifically, the Examiner appears to argue that allegedly the only practical application of the disclosed and/or claimed process is printing, and since the claims do not disclose printing, there is no claimed practical application.

However, the Examiner's analysis is incorrect on two grounds. First, the teachings of the present application provide practical applications other than printing. Second, the claims do provide a practical application of the present invention in the context of *State Street.*

1. Application teaches several practical applications:

In the present application, the Examiner appears to be taking the position that the claims "are directed to abstract manipulations" and "propose an abstract result without providing for a practical application of the claimed process". The Examiner then concludes that the claims are nonstatutory because they preempt all general applications of the computer program and its mathematical formula.

The patent in *State Street Bank & Trust v. Signature Financial Group*, 47 USPQ2d 1596 (Fed. Cir. 1998) claims a practical application. A copy of the claims from the *State Street* patent, U.S. Patent No. 5,193,056, are attached for the convenience of the Examiner. Claim 1 of *State Street* claims a "data processing system" that includes a plurality of means for processing data. The Federal Circuit determined that the claim claims a "machine" in accordance with 35 USC 101. The Court then went on to analyze the claim to determine whether the machine fell into an exception to the statutory subject matter.

The *State Street* decision held that certain types of mathematical subject matter, standing alone, represent nothing more than abstract ideas *until reduced to some type of practical application*, i.e., "a useful, concrete and tangible result". *Id.* at 1600 -01 (emphasis added) The Court went on to "...hold that the transformation of data, representing discrete dollar amounts, by a machine through a series of mathematical calculations into a final share price, constitutes a practical application of a mathematical algorithm, formula, or calculation, because it produces 'a useful, concrete and tangible result' – a final share price momentarily fixed *for recording and reporting purposes...*" *Id.* at 1601. (emphasis added) It is important to note claim 1 in *State Street* did not include any provisions for recording or reporting the data, even though that is the practical application relied upon by the Court. The claim was deemed useful because the calculated data could be used for useful purposes such as "recording and reporting purposes", even though the claim itself did not include the acts or means for recording or reporting the data. The mere calculation of data deemed useful was sufficient.

Accordingly, under *State Street*, a machine capable of producing useful data was deemed statutory, even though the machine as claimed did not itself use the data. With this background, the practical applications disclosed in the present application will be discussed.

a. the produced data rearranges input data in a useful manner

The present invention is useful *"for filing"* because it has means for extracting necessary document data blocks from image data obtained by reading a document. See paragraph [0046] of the published application.

b. the produced data is readable

According to paragraph [0009] of the published application, the produced document data is readable *without waste*.

c. the produced data is storable

According to paragraph [0018], the image processing device generates an electronic file *for storing* the character code data laid out by the layout means.

d. the produced data is printable

As recognized by the Examiner, the data produced by the present invention may also be *printed*. See paragraph [0088].

Accordingly, the present application recites and describes several useful uses of the data obtained by the claimed machine. The Examiner refers to the dependent claims which specifically recite storing, printing, and reading, and alleges that such claims "do not claim the practical utility of the claimed functions". Under *State Street*, the claim does not need to explain how or why the claimed function is useful. It is only necessary that the claimed function be useful. Accordingly, applicants submit that filing, reading without waste, storing, or printing are all useful applications and are adequately described in the specification. That is all that is required by *State Street*.

2. The claims do provide a practical application of the present invention:

Like the claim in *State Street*, claim 1 of the present application does not recite the means or steps for filing, reading without waste, storing, or printing. The claim recites a machine for transforming data into a condition so that it can be used for filing, reading without waste, storing, or printing. However, the holding in *State Street* is that the transformation of data into data that can be used for some useful purpose is statutory subject matter. *Id.* at 1601.

The Examiner expresses concern that the claims will preempt all substantial uses of the computer program. However, in that regard, the Examiner has not articulated any distinction between claim 1 of the present application and claim 1 in *State Street*. Both claims define a machine that transforms data into a format that is *useful* for some subsequent unclaimed process. Accordingly, both claims define statutory subject matter.

3. Creation of a layout image is a tangible and useful result

The Examiner alleges in the Advisory Action that the specification does not define "layout image". The Examiner then concludes that the claimed layout image is therefore abstract, and therefore creating a layout image cannot be a tangible and useful result. However, such an argument by the Examiner ignores the fact that patent specifications are directed to one of ordinary skill in the art. It is inconceivable that one of ordinary skill in the art, after reading the specification, would not know exactly what a layout image is. The fact that the layout image may be embodied in different formats, e.g., printed, stored, filed, or read, does not render the layout

image undefined or abstract. Accordingly, Applicants submit that the creation of a layout image is a tangible and useful result.

4. Kurasawa does not anticipate the claims:

The Examiner alleges that *Kurosawa* anticipates claims 1 - 34, 37 - 40, and 42 - 47.

Claims 1, 3, 5, 9, 11, 13, 17, 27, 32, and 33:

Kurosawa reorganizes all of the image data, not less than all of the image data, as recited in claims 1, 3, 5, 9, 11, 13, 17, 27, 32, and 33, each of which has been amended to recite detecting "a user selection of a plurality of document blocks that is marked on a scanned document". *Kurosawa* discloses that "in a document image processing apparatus to input a document as the image data (for example, a facsimile apparatus or a copy machine), a user indicates the necessary area to be edited from the document on a display using a pointing device." See column 1, lines 14 - 18. Thus, *Kurosawa* requires a *display* for the user to select the plurality of document blocks. Further, since the display of *Kurosawa* would need to reproduce the contents of the documents in a form recognizable to the user selecting portion(s) thereof, *Kurosawa* requires a relatively large (and expensive) display. The present claims, however, do not require a display for the user to select the plurality of document blocks. In particular, as explained on page 9, lines 19 - 21, of the present specification, the "mark is added to the document by the user beforehand using a marker such as a felt-tip pen or the like." The marked document is then scanned.

Claim 1:

With regard to claim 1, the Examiner alleges that the *Kurosawa* paragraph beginning at column 11, line 13, teaches that all the document image data in the extracted at least one document block represents fewer document images than all of the document images that are present on the scanned document. However, that paragraph refers to the editing steps (1) through (7), described previously in *Kurosawa*. In particular the Examiner alleges that the generation of a blank space implies that some data is deleted. However, as clearly set forth in the previous description of editing step (6), the generation of a blank space is accomplished by *moving* data, not by deleting the data. See Figure 8B, wherein a blank space was generated by moving character line block 2 from its original position shown in Figure 8A. There is no discussion in *Kurosawa* of deleting data. Accordingly, *Kurosawa* does not teach or suggest the claimed extracting means.

Furthermore, claim 1 has been amended by including therein the subject matter of claim 2. With regard to the subject matter of claim 2, the Examiner refers to Figure 11 of *Kurosawa*. However, Figure 11, and the related text teaches moving various blocks from one position to another. See column 11, lines 1 - 4, wherein a moving, not a combining operation is described. Figure 11 actually illustrates a batch editing of the process described in section (1) Change of Position Relation of Each Block. Accordingly, Figure 11 illustrates moving a plurality of blocks, it does not illustrate an extraction means for extracting a plurality of document blocks, and a reconstruction means for arranging the plurality of extracted document blocks *into a single block* reconstructed to the specific shape. Claim 1 is therefore patentable over Furasawa.

Claim 3:

With regard to claim 3, the Examiner merely states that the claim "does not claim any special processing concerning the headline and the body text." That comment by the Examiner is not understood. The Examiner's attention is directed to steps S214 and S215 of Figure 3, and paragraphs [0080], [0081], and [0083] of the published application for a description of a preferred embodiment of such processing. However, the present invention is not limited to the preferred disclosed embodiments. Accordingly, the Examiner has failed to show how *Kurosawa* anticipates the subject matter of claim 3.

Claim 5:

Claim 5 recites, among other elements, that the reconstruction means adjusts a vertical or horizontal dimension of the at least one document block to a length approximating a natural integer multiple of a length of one column of multiple columns formed within the at least one document block. The Examiner simply refers to step (5) of Furasawa.

However, step (5) of *Kurosawa*, described at column 8, line 6, through column 9, line 23, merely indicates that the *Kurosawa* device checks to see if the requested enlargement or reduction will fit within the available space. There is no discussion of adjusting a vertical or horizontal dimension of the at least one document block to a length approximating a natural integer multiple of a length of one column of multiple columns formed within the at least one document block. In the event that the Examiner maintains the rejection of claim 5, the Examiner is respectfully requested to point out where the subject matter of claim 5 is taught in step (5).

Claim 9:

Claim 9 has been amended to include the subject matter of claim 10.

With regard to claim 9, the Examiner alleges that the *Kurosawa* paragraph beginning at column 11, line 13, teaches that all the document image data in the extracted at least one document block represents fewer document images than all of the document images that are present on the scanned document. However, that paragraph refers to the editing steps (1) through (7), described previously in *Kurosawa*. In particular the Examiner alleges that the generation of a blank space implies that some data is deleted. However, as clearly set forth in the previous description of editing step (6), the generation of a blank space is accomplished by *moving* data, not by deleting the data. See Figure 8B, wherein a blank space was generated by moving character line block 2 from its original position shown in Figure 8A. There is no discussion in *Kurosawa* of deleting data. Accordingly, *Kurosawa* does not teach or suggest the claimed extracting means.

With regard to the subject matter of claim 10, the Examiner refers to Figure 11 of *Kurosawa*. However, Figure 11, and the related text teaches moving various blocks from one position to another. See column 11, lines 1 - 4, wherein the moving, not combining operation is described. Figure 11 actually illustrates a batch editing of the process described in section (1) Change of Position Relation of Each Block. Accordingly, Figure 11 illustrates moving a plurality of blocks, it does not illustrate an extraction means for extracting a plurality of document blocks, and a reconstruction means for arranging the plurality of extracted document blocks *into a single block* reconstructed to the specific shape. Claim 9 is therefore patentable over Furasawa.

Claim 11:

With regard to claim 11, the Examiner merely states that the claim "does not claim any special processing concerning the headline and the body text." That comment by the Examiner is not understood. The Examiner's attention is directed to steps S214 and S215 of Figure 3, and paragraphs [0080], [0081], and [0083] of the published application for a description of a preferred embodiment of such processing. However, the present invention is not limited to the preferred disclosed embodiments. Accordingly, the Examiner has failed to show how *Kurosawa* anticipates the subject matter of claim 11.

Claim 13:

Claim 13 recites, among other elements, that the reconstruction means adjusts a vertical or horizontal dimension of the at least one document block to a length approximating a natural integer multiple of a length of one column of multiple columns formed within the at least one document block. The Examiner simply refers to step (5) of *Kurosawa*.

However, step (5) of *Kurosawa*, described at column 8, line 6, through column 9, line 23, merely indicates that the Furasawa device checks to see if the requested enlargement or reduction will fit within the available space. There is no discussion of adjusting a vertical or horizontal dimension of the at least one document block to a length approximating a natural integer multiple of a length of one column of multiple columns formed within the at least one document block. In the event that the Examiner maintains the rejection of claim 13, the Examiner is respectfully requested to point out where the subject matter of claim 13 is taught in step (5).

Claim 17:

With regard to claim 17, the Examiner alleges that the *Kurosawa* paragraph beginning at column 11, line 13, teaches that all the document image data in the extracted at least one document block represents fewer document images than all of the document images that are present on the scanned document. However, that paragraph refers to the editing steps (1) through (7), described previously in *Kurosawa*. In particular the Examiner alleges that the generation of a blank space implies that some data is deleted. However, as clearly set forth in the previous description of editing step (6), the generation of a blank space is accomplished by *moving* data, not by deleting the data. See Figure 8B, wherein a blank space was generated by moving character line block 2 from its original position shown in Figure 8A. There is no discussion in *Kurosawa* of deleting data. Accordingly, *Kurosawa* does not teach or suggest the claimed extracting means.

Claim 17 has also been amended to include the subject matter of claim 2. With regard to that subject matter, the Examiner refers to Figure 11 of *Kurosawa*. However, Figure 11, and the related text teaches moving various blocks from one position to another. See column 11, lines 1 - 4, wherein the moving, not combining operation is described. Figure 11 actually illustrates a batch editing of the process described in section (1) Change of Position Relation of Each Block. Accordingly, Figure 11 illustrates moving a plurality of blocks, it does not illustrate an extraction means for extracting a plurality of document blocks, and a reconstruction means for arranging the plurality of extracted document blocks *into a single block* reconstructed to the specific shape. Claim 17 is therefore patentable over Furasawa.

Claim 27:

With regard to claim 27, the Examiner alleges that the *Kurosawa* paragraph beginning at column 11, line 13, teaches that all the document image data in the extracted at least one document block represents fewer document images than all of the document images that are present on the scanned document. However, that paragraph refers to the editing steps (1) through (7), described previously in *Kurosawa*. In particular the Examiner alleges that the generation of a blank space implies that some data is deleted. However, as clearly set forth in the previous description of editing step (6), the generation of a blank space is accomplished by *moving* data, not by deleting the data. See Figure 8B, wherein a blank space was generated by moving character line block 2 from its original position shown in Figure 8A. There is no discussion in *Kurosawa* of deleting data. Accordingly, *Kurosawa* does not teach or suggest the claimed extracting means.

Claim 27 has also been amended to include the subject matter of claim 2. With regard to that subject matter, the Examiner refers to Figure 11 of *Kurosawa*. However, Figure 11, and the related text teaches moving various blocks from one position to another. See column 11, lines 1 - 4, wherein the moving, not combining operation is described. Figure 11 actually illustrates a batch editing of the process described in section (1) Change of Position Relation of Each Block. Accordingly, Figure 11 illustrates moving a plurality of blocks, it does not illustrate an extraction means for extracting a plurality of document blocks, and a reconstruction means for arranging the plurality of extracted document blocks *into a single block* reconstructed to the specific shape. Claim 27 is therefore patentable over *Kurosawa*.

Claim 32:

With regard to claim 32, the Examiner alleges that the *Kurosawa* paragraph beginning at column 11, line 13, teaches that all the document image data in the extracted at least one document block represents fewer document images than all of the document images that are present on the scanned document. However, that paragraph refers to the editing steps (1) through (7), described previously in *Kurosawa*. In particular the Examiner alleges that the generation of a blank space implies that some data is deleted. However, as clearly set forth in the previous description of editing step (6), the generation of a blank space is accomplished by *moving* data, not by deleting the data. See Figure 8B, wherein a blank space was generated by moving character line block 2 from its original position shown in Figure 8A. There is no discussion in *Kurosawa* of deleting data. Accordingly, *Kurosawa* does not teach or suggest the claimed extracting means.

Claim 32 has also been amended to include the subject matter of claim 2. With regard to that subject matter, the Examiner refers to Figure 11 of *Kurosawa*. However, Figure 11, and the related text teaches moving various blocks from one position to another. See column 11, lines 1 - 4, wherein the moving, not combining operation is described. Figure 11 actually illustrates a batch editing of the process described in section (1) Change of Position Relation of Each Block. Accordingly, Figure 11 illustrates moving a plurality of blocks, it does not illustrate an extraction means for extracting a plurality of document blocks, and a reconstruction means for arranging the plurality of extracted document blocks *into a single block* reconstructed to the specific shape. Claim 32 is therefore patentable over *Kurosawa*.

Claim 33:

With regard to claim 33, the Examiner alleges that the *Kurosawa* paragraph beginning at column 11, line 13, teaches that all the document image data in the extracted at least one document block represents fewer document images than all of the document images that are present on the scanned document. However, that paragraph refers to the editing steps (1) through (7), described previously in *Kurosawa*. In particular the Examiner alleges that the generation of a blank space implies that some data is deleted. However, as clearly set forth in the previous description of editing step (6), the generation of a blank space is accomplished by *moving* data, not by deleting the data. See Figure 8B, wherein a blank space was generated by moving character line block 2 from its original position shown in Figure 8A. There is no discussion in *Kurosawa* of deleting data. Accordingly, *Kurosawa* does not teach or suggest the claimed extracting means.

Claim 33 has also been amended to include the subject matter of claim 2. With regard to that subject matter, the Examiner refers to Figure 11 of *Kurosawa*. However, Figure 11, and the related text teaches moving various blocks from one position to another. See column 11, lines 1 - 4, wherein the moving, not combining operation is described. Figure 11 actually illustrates a batch editing of the process described in section (1) Change of Position Relation of Each Block. Accordingly, Figure 11 illustrates moving a plurality of blocks, it does not illustrate an extraction means for extracting a plurality of document blocks, and a reconstruction means for arranging the plurality of extracted document blocks *into a single block* reconstructed to the specific shape. Claim 33 is therefore patentable over *Kurosawa*.

Dependent Claims:

The remaining claims are dependent claims which define additional subject.

The dependent claims are patentable over *Kurosawa* at least for the reasons set

forth above with respect to the independent claims from which they depend.

Applicants reserve the right to challenge any of the Examiner's interpretations of

Kurosawa at a later time if necessary and appropriate.

Conclusion

For at least the reasons stated above, the Examiner is respectfully requested

to reconsider and withdraw the outstanding rejections and objections, and to allow

the present application.

In the event that there are any questions concerning this amendment, or the

application in general, the Examiner is respectfully urged to telephone the

undersigned attorney so that prosecution of the application may be expedited.

Respectfully submitted,

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